

How to Develop Students' Character Education, Based on a Social Studies Comic Book

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This research is aimed at producing a character education based Social Studies comic media (comic media), for effective teaching and learning for students in primary schools. Its ISBN number is 978-602-8768-35-1 and its intellectual property rights "HKI" number and date are EC00201814589, 4 June 2018. In addition, such media will able to improve their reading interests, to eventually improve their Social Studies results. The method of Research and Development was drawn from Dick et al. (2009). Fifth graders in the sub-district area of Jatisari, Indonesia were surveyed. The t-test was calculated to be t-count (11.67) > t-table (2.05). That means a significant improvement in Social Studies results, by using comic media, to teach Social Studies. In other words, a combination of text and visual aid (comic book) tend to support better learning than a mere text.

Key words: *Comic media, character education, learning result of social studies.*

Introduction

Almost every part of the world knows what a comic is. It is well-known in Japan and the United States of America. However, the comic has not been regarded as a learning medium. Instead it serves as an entertainment medium for those who love it. Therefore, research into the comic as a learning medium was initiated in line with the following suggestion:

Comics are regarded as tools, either for engaging pupils in the content of the curriculum or as a form of social cohesion, particularly in projects where pupils in involved in creating comics of their own (Cary 2004; Bucky 2007; Thomson, 2008; Thurman & Hearn 2010).

Data was derived from observing social sciences teachers (observation data, 2017), in a Primary School in Indonesia. It shows that textbooks have long been used in teaching, instead of comics which have not been optimally used as a learning medium. Low interest in reading has resulted. To boost reading, a combination of textual and visual learning medium is required, to maintain primary school students' pleasure in learning. The low interest in reading relates in outcomes of low learning.

The comic created by the research team will be a Comic of Social Sciences, based on national character, to promote learning outcomes in Social Sciences. After it has been examined by experts in materials, media and language, the comic will then be used for research. Therefore, this research is significant.

In addition, this research is necessary for deciding on an appropriate solution with regard to the lack of learning media. Developing a Social Sciences comic based on national character will also be an effective and attractive medium for primary school students, in line with the "fun learning" concept. It will address the presently less-than-optimal implementation of character education in textual learning. Finally, it could potentially address globalization based on informatics media through social media, comics in particular, by changing the media such that there will be no absence of a national character. In other words, the students' learned attitudes will preserve the unique, Indonesian values expressed as "Pancasila" in this homogenised world of globalization.

The research is useful for increasing students' reading interest, which will promote learning outcomes in the subject of Social Sciences. Students will learn in a more interesting way about Social Sciences, with character education content, as they learn consciously by means of the comic. This research also produces a comic on Social Sciences, based on character education in social sciences learning for primary schools. The product of the research is to meet the target of an effective social sciences comic, based on character education for Primary School students.

Previous research has discovered the effectiveness of comics as a learning medium (Herner, Leah, & Lee, 2009), and as an education tool (Crippen, 2003; Barkowits & Packer, 2001). According to Berkowitz, Marvin & Bier (2004), teacher implementation is critical to the effectiveness of character education.

The research conducted has been in line with former research in other countries. However, its creation of a comic with an ISBN number and Intellectual Property Rights is novel. The learning process accords with social sciences material, complete with a comic representing the character of Indonesia. Berkowitz, Marvin & Bier (2004) declared that the effectiveness of character education relies on teachers. Yet the novelty of the research secondly denotes

that effectiveness of education also relies on students taking the comic's character education as an example, in which they might read it (the comic created by researcher team) independently. Thus, this research completes unrevealed gaps, to emphasize that character education depends not only on teachers but also students, by means of the comic.

This research shares a similar viewpoint with that of Herner, Leah M; Patnode; and Lee, Han Jin (2009), Crippen (2003) and Barkowits & Packer (2001), on the effectiveness of comics as a learning medium and education tool.

Thirdly, the research is novel, in that the use of comics as a learning medium is able to achieve a significant learning outcome in Social Sciences.

The problems can be formalized as follows: firstly, "How is a Social Sciences comic based on character education, and effective for the fifth grade of primary school developed/created?" Secondly, is the learning outcome in Social Sciences increased by using the comic as a medium?

Method

This research used a research and development method of Dick et al. (2009: 6-8). Their method comprised ten stages that can be illustrated in a diagram below:

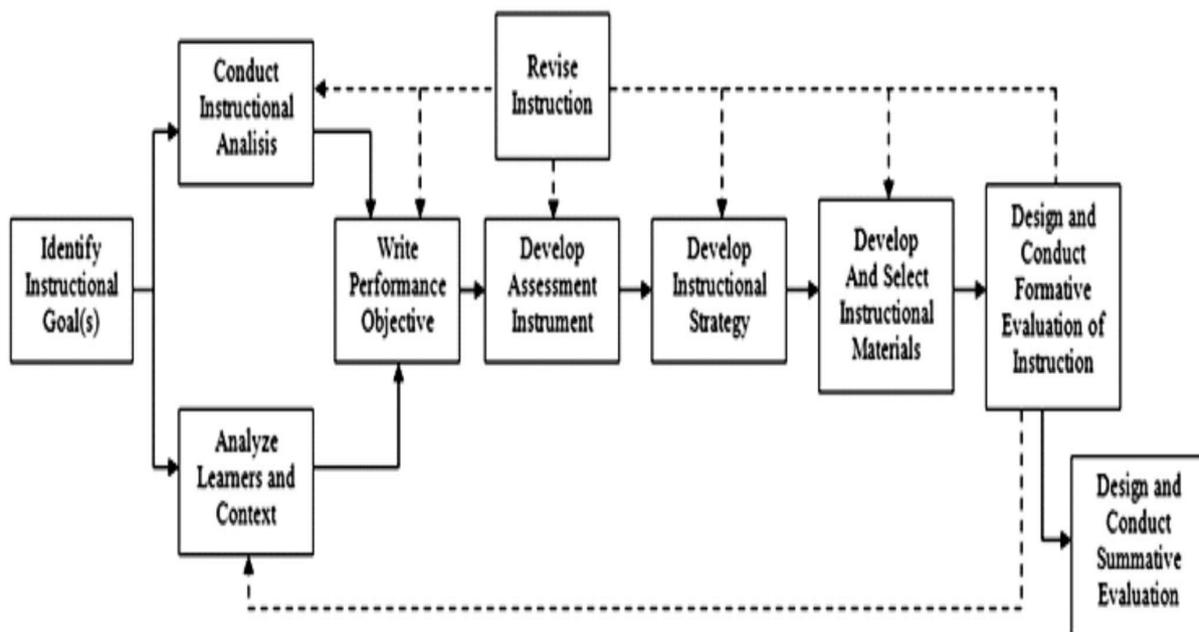


Illustration of Dick et al.'s Model

The followings are the stages in the development of comic media in social studies, using Dick et al.'s model:

First, a needs analysis determined the purpose of the teaching and learning process, by way of observation and interview with teachers. It determined what can be done by the students after they follow the teaching and learning.

Hopefully this analysis of needs can help the researcher identify the most appropriate and useful needs, in teaching and learning.

The second stage was analysing teaching and learning. This stage identified the student skills to be reached. It will also determine the steps to be done by the students, when they want to achieve their goals and determine their skills as well as the knowledge that needs to be acquired.

Third, the students and environment were analysed. This involved identifying students' individual quality, as the clue for describing the teaching and learning strategy. Grade five students are in the concrete operation phase of learning characteristics. At this age, they start to be able to think critically and to develop their reasoning ability. Teaching and learning in a classical classroom tend to generate boredom in the learning process. Therefore, character education based media is used in the teaching and learning process of Social Studies.

Fourth, the purpose of a specific teaching and learning process was assessed, to determine an ability that students will learn. It also provided a facility in relation to the teaching and learning process, to achieve its goals. Based on the instructional analysis result, either a competence or specific instructional objectives should be mastered by the students, to achieve specific teaching and learning objectives.

The fifth stage was developing an assessment instrument, to assess student performance. It means that the success of the students in this test determines whether they have achieved a specific purpose, whether determined or not. The evaluation sheet on the teaching and learning process has a function to measure "knowledge," by using multiple choice questions.

Sixth, teaching and learning media were developed. It comprised developing a media in a pre-instruction (motivation, purpose and behaviour intake), information presentation (series of instructions, information, sample), learner participation (practical and feedback), and assessments (*pre-test* and *post-test*).

Seventh, the teaching and learning strategy was applied through a character education based Social Studies comic media (comic media), in the teaching and learning process of Social

Studies. This teaching and learning strategy involved explaining the general components of a set of teaching and learning process materials, and developing materials, based on the procedure conducted, to ease learning.

The eighth stage was designing and conducting a formative evaluation to identify whether a given teaching and learning process ran effectively. The result can then be used to revise the draft of the program. In short, formative evaluation identifies inadequacies in teaching and learning activities.

Ninth, a revision of teaching and learning was conducted, to perfect the comic media, to make it more interesting and effective, and ease the attainment of the stipulated learning objectives.

Last, a summative evaluation was designed and developed. Summative evaluation is an assessment conducted at the peak of the Dick et al. activity model. The decision for assessment is based on the effectiveness of teaching and learning activities. Thus, summative evaluation is directed to the success of the stipulated purpose.

Reliability Test by Experts

The reliability of the comic was examined by experts in language, media, and material. Professor Dr. Zulela (M.S.), the language expert, validated systematics and the language style of the comic. Professor Dr Nurdin Ibrahim (M.Pd), validated the media layout that had been developed. Professor Dr M. Syarif Sumantri, the material expert, validated the appropriateness of the content, as to learning materials and objectives. Results of the trial test, using a reliability instrument by means of the questionnaire, were employed as data in the research. Data collected from the questionnaire were the result data of the experts, from which evaluations and recommendations were derived. They can be used to revise the comic.

Test Instrument of Learning Outcome in Social Sciences

Validity and reliability tests were conducted. Test results were then used to probe the research data. Fifth grade students of the Primary School in Jatisari District, Karawang Regency, West Java, were selected as respondents/subjects of the research by means of random sampling.

Result and Discussion

Results

Character Education Based Social Studies Comic Media in the Teaching and Learning Process of Social Studies

A study on the effectivity of using comic media in the teaching and learning activities was proposed (Herner, Leah, & Lee, 2009). The study showed that the use of comic media facilitates wider communication for students skills and talents. The skills and usage of comic media by educators have been widely supported. This study resulted in the use of comic media to effectively deliver materials to students.

Other studies show that having a comic media offers various tools for education (Crippen, 2003). Choosing a comic media for educators can improve the performance of the students, the efficacy of education, and the effectiveness of the teaching and learning process. This study also showed that high-quality tools are key to a successful, high standard of teaching and learning.

Other studies showed that the use of a comic media in education can improve the effectiveness of delivery, giving educators flexibility (Herner, Leah, & Lee, 2009). Also, comic media can help students better understand the delivered materials, to develop high-level thinking and find problem-solving strategies.

According to Smaldino, Russell, Heinich, & Molenda (2014), the media is a medium or messenger, from the sender to the receiver of the message. Using media in the teaching and learning process eases communication and learning.

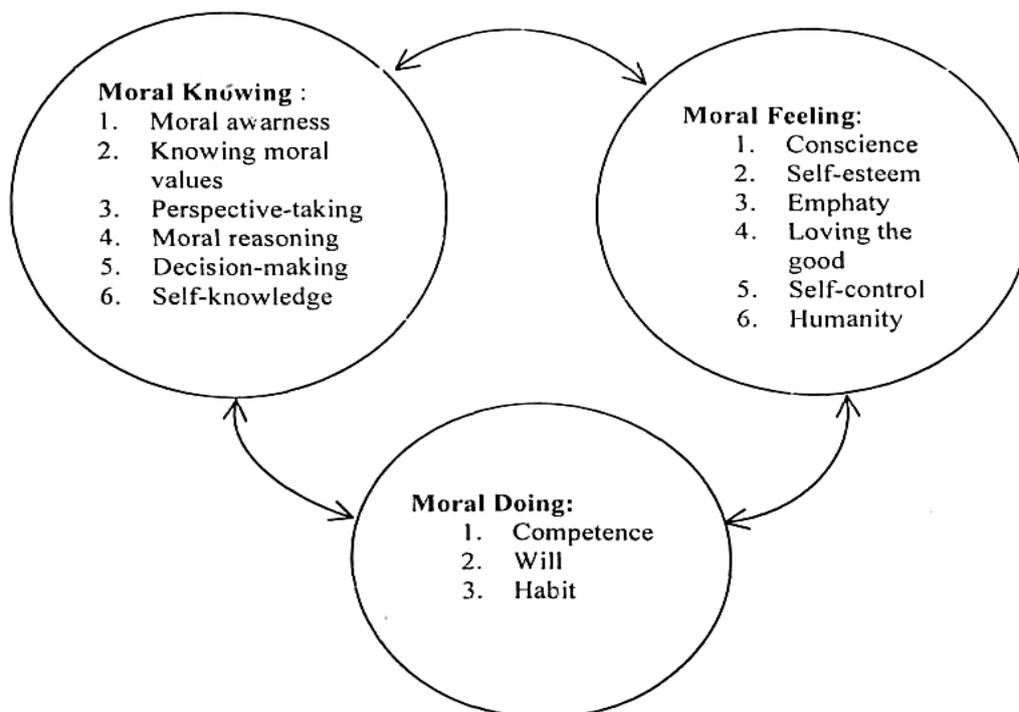
Craggs (2002) stated that education media is one way to develop students' critique, when understanding teaching and learning materials. If they find media easy to use, that will enable them to participate actively in the teaching and learning process.

Other studies (Barkowits & Packer, 2001) used comics as pictures in certain orders. It meant delivering a message and showing an aesthetic value for those who see it, making it easier for students to learn.

Various trials that have been done, related to character education based on science and influence from character education of the students (Berkowitz, Marvin & Bier, 2004). From this study, it is very clear that one of the most critical factors in the efficacy of character education is loyalty in implementing it. The effectiveness of character education depends on how the teachers implement it.

A study concerning character education was conducted by Sarros, & Cooper (2002). It showed that three phases are needed. The first is to know moral awareness and moral reasoning, as well as the determination of a series of proper actions. The second phase is relating, to doing something right, moral feelings of right and wrong, pride, empathy and inferiority. The third phase is moral action, related to competition and willingness, as well as action.

Lickona (1992: 36) described educating for character. The question arises: How our schools can teach respect and responsibility? They explain that moral doing is the result of moral knowing and moral feeling. People with a good level of intelligent and moral feeling have a good morality when doing. The interrelation between moral knowing, moral feeling and moral doing can be depicted with the scheme below.



Based on Lickona (1992: 36)

The Advantages of Comics as Teaching and Learning Media

Comic books are rampant in the community, and there is increasing fondness towards them. This has inspired the making of comic books as a teaching and learning media as conducted by Thorndike. One of the advantages of comic books is that the reading of more comic books by children, for example, a minimum of one comic book per month, is equal to reading subject matter books annually. This affects the reading ability of the students as well as their

mastery of vocabulary, in that they have more vocabulary compared to those who do not like to read comic books (Damyanto, 2010: 128).

Other advantages from comic books are that the presentation contains more visual and strong storylines. The visualized expressions involve the readers emotionally, so that they continue to read it until the story is finished. These are the things that inspired making a comic book with learning material content, since students tend to dislike text books especially those without any interesting pictures or other illustrations. Empirically, students tend to be fond of visualized, colourful books, with pictures in realistic forms or cartoons (Damyanto, 2010: 128).

Comic books can attract the student's passion to learn. They can also teach the interpretation of stories into pictures, as if the children are facing a real concept. This imprinted effects on students which they will show and remember for a longer time. In line with that opinion, Wregh in Norton & Vanderheyden (2004: 203) explained that *Almost two decades before Krashen's work on free voluntary reading, Wright had already made the case that the type of visuals found in comic books contributes positively to second language reading*. This means that comic books contribute positively to the understanding of language, and also to reading, so reading comic books will motivate higher reading. *Comics have been used to motivate children to read* (Hangard (1973) in Hosler (2011)). Accordingly, experts opine that children who read comic books every month will master vocabularies, enabling them to read twice as much as the textbook vocabularies they read annually.

The materials obtained in a comic book can be fully explained. This means that materials, in the form of pictures, can explain the entire story. Thus, materials supported by picture illustrations can help children to know the forms or what was meant by the materials being delivered.

The Characteristics of Students of Grade Five of Primary School

According to Sumantri (2016: 154), the forms of Primary Students characteristics are as follows:

(1) *Likes to play*. This characteristic demands that Primary School teachers focus education activities on games, especially for lower grades. (2) *Likes to move*. Adults can sit for hours whereas Primary School students can mostly sit still and quiet for around 30 minutes. Thus, teachers should design a teaching and learning model that can make the students move around and stir. (3) *Likes to work in a group*. From socialization with their peers, students learn the important process of socialization. They learn to meet the rules of the group, to be responsible, and to be loyal to their friends, etc.

Primary School students are, on average, in the range of 6-12 years of age. They are able to react to an intellectual stimulus, or do learning assignments that demand intellectual abilities or cognitive abilities such as reading, writing and calculating (Yusuf, 2008: 178).

When children enrol in a primary school, they are stimulated to be curious, to develop their passion to explore the environment and to interact with other people (Ansori, 2008: 185). Jean Piaget divides cognitive development into four phases, namely: (1) Motor Sensory phase, experienced up to the age of 2 years; (2) Pre-Operation phase, between 2-7 years; (3) Concrete Operation phase, between 7-11 years; (4) Formal Operation phase, above 11 years of age (Ansori, 2008: 51).

Children at primary schools are at the range of 6-12 years old, the concrete operation thinking phase. Children start to adjust themselves to concrete reality, and have started to evolve their curiosity. According to Piaget, their interaction with the environment, including their parents, has been well-evolved because they are less self-centred and more developed.

It shows that in this phase, children's development tends to logical thinking based on physical manipulation of objects, or events experienced directly by them.

Santrock (2014: 329) explained that in the concrete operation phase, students can conduct a concrete operation, and they can have logical reasoning as far as the reasoning itself can be applied to specific or concrete examples. The teaching and learning process should be directed and applied to real objects.

Students in the concrete operation phase are able to think, using sufficient logic with the help of concrete objects. Students are not yet able to digest abstract materials. Such characteristics mean that the teaching and learning process should use concrete objects for the students, instead of using a merely verbal language. Teaching and learning should occur with an activity that contains a sensory interaction, one between students with concrete objects or a phenomenon to develop the students' thinking.

The cognitive process is also relevant. Through observing an object with their five senses, the children are able to get information that will later be stored memory in the brain. However, not all information can be stored in their memory.

Grade five students have started to be able to arrange data based on its form, but they will struggle to verbalise the definition. They are not yet abstracting fully. Instead, they still undergo a concrete thinking process to abstract, mostly known as semi-abstractation. The relationship or association between one response and another exists already. That

conceptualisation requires media or demonstration tools appropriate for the lessons being taught, and for students' intellectual development.

Educators use media in the teaching and learning process, because it will interest students in following the teaching and learning process, providing interesting learning experiences.

Discussion

Character education comic media provides a needs analysis instrument, for the teaching and learning process of Social Studies. Researchers conducted their investigation into that media, through interviews and observations of Social Studies teachers and their students. The needs analysis indicated that in the implementation of the teaching and learning of the Social Studies process, teachers still encounter difficulties in determining suitable teaching and learning media for the students' needs. It resulted in a passive and incommunicative teaching and learning process. The students were bored and not interested in that process. The teachers were supportive in the event of the provision of comic media, in the teaching and learning process of Social Studies.

It was then found that students still find difficulties in understanding Social Studies material. Also, the students support the use of comic media, in the teaching and learning process of Social Studies, so that they can learn anywhere and anytime using plenty of pictures.

Thus, the research team was interested to create a teaching and learning media, to activate students in the teaching and learning process, by relating characters into a comic form. The researcher team also expected that the use of comic media, in teaching Social Studies, eases the understanding of both an abstract concept and the teaching and learning material which is realized in a concrete form, in the topic of the Preparation for Proclaiming Indonesia's Independence.

The feasibility instrument for the comic media appearance, in the teaching and learning process of Social Studies done by the students, was tested for its validity and reliability. Out of 15 statement items, several items were considered invalid (being dropped), namely items number 4 and number 9. Thus, there were only 13 valid items.

Based on the calculation of the reliability of feasibility instrument of comic media appearance done by the students, by calculating its reliability as $r_{11} = 0.940$ in the category (0.800-1000), it can be concluded that the instrument has a really high-reliability rate.

The test instrument of the learning result of Social Studies prior to its use to gather the data in the field had been tested for its validity and reliability.

In the preliminary test regarding learning character education based Social Studies, 25 items were asked. The validity test calculated that several questions needed to be dropped (claimed invalid), namely questions number 4, 6, 11, 19, and 23. Thus only 20 valid question items could be used for the next activity.

From the calculation of the result of the reliability of $r_{ii} = 0.992$ includes in the category (0.800-1.000), it can be concluded that the reliability rate is very high.

Based on the normality test using the Lilliefors formula, the Social Studies learning result, prior to using comic media, was the value of L_{count} of 0.128, and L_{table} for $n = 45$ with a significance rate of 0.05 was 0.132, then the $L_{count} < L_{table}$. Thus, the data of the Social Studies learning result prior to using comic media was normally distributed.

Table 1: Normality Calculation Using Lilliefors Data of Social Studies Learning Result Using Comic Media

No.	X_1	$X_1 - X_1$	Z_i	Z_t	$F(z_i)$	$S(z_i)$	$[F(z_i) - S(z_i)]$
1	5.5	-1.53	-2.159	0.4842	0.016	0.022	0.006
2	6	-1.03	-1.455	0.4265	0.074	0.044	0.029
3	6	-1.03	-1.455	0.4265	0.074	0.067	0.007
4	6	-1.03	-1.455	0.4265	0.074	0.089	0.015
5	6	-1.03	-1.455	0.4265	0.074	0.111	0.038
6	6	-1.03	-1.455	0.4265	0.074	0.133	0.060
7	6	-1.03	-1.455	0.4265	0.074	0.156	0.082
8	6	-1.03	-1.455	0.4265	0.074	0.178	0.104
9	6.5	-0.53	-0.751	0.2734	0.227	0.200	0.027
10	6.5	-0.53	-0.751	0.2734	0.227	0.222	0.004
11	6.5	-0.53	-0.751	0.2734	0.227	0.244	0.018
12	6.5	-0.53	-0.751	0.2734	0.227	0.267	0.040
13	6.5	-0.53	-0.751	0.2734	0.227	0.289	0.062
14	6.5	-0.53	-0.751	0.2734	0.227	0.311	0.085
15	6.5	-0.53	-0.751	0.2734	0.227	0.333	0.107
16	7	-0.03	-0.047	0.0160	0.484	0.356	0.128
17	7	-0.03	-0.047	0.0160	0.484	0.378	0.106
18	7	-0.03	-0.047	0.0160	0.484	0.400	0.084
19	7	-0.03	-0.047	0.0160	0.484	0.422	0.062
20	7	-0.03	-0.047	0.0160	0.484	0.444	0.040
21	7	-0.03	-0.047	0.0160	0.484	0.467	0.017
22	7	-0.03	-0.047	0.0160	0.484	0.489	0.005

No.	X ₁	X ₁ - X ₁	Z _i	Z _t	F(z _i)	S(z _i)	[F(z _i) - S(z _i)]
23	7	-0.03	-0.047	0.0160	0.484	0.511	0.027
24	7	-0.03	-0.047	0.0160	0.484	0.533	0.049
25	7	-0.03	-0.047	0.0160	0.484	0.556	0.072
26	7	-0.03	-0.047	0.0160	0.484	0.578	0.094
27	7	-0.03	-0.047	0.0160	0.484	0.600	0.116
28	7.5	0.47	0.657	0.2422	0.742	0.622	0.120
29	7.5	0.47	0.657	0.2422	0.742	0.644	0.098
30	7.5	0.47	0.657	0.2422	0.742	0.667	0.076
31	7.5	0.47	0.657	0.2422	0.742	0.689	0.053
32	7.5	0.47	0.657	0.2422	0.742	0.711	0.031
33	7.5	0.47	0.657	0.2422	0.742	0.733	0.009
34	7.5	0.47	0.657	0.2422	0.742	0.756	0.013
35	7.5	0.47	0.657	0.2422	0.742	0.778	0.036
36	7.5	0.47	0.657	0.2422	0.742	0.800	0.058
37	8	0.97	1.361	0.4131	0.913	0.822	0.091
38	8	0.97	1.361	0.4131	0.913	0.844	0.069
39	8	0.97	1.361	0.4131	0.913	0.867	0.046
40	8	0.97	1.361	0.4131	0.913	0.889	0.024
41	8	0.97	1.361	0.4131	0.913	0.911	0.002
42	8	0.97	1.361	0.4131	0.913	0.933	0.020
43	8	0.97	1.361	0.4131	0.913	0.956	0.042
44	8	0.97	1.361	0.4131	0.913	0.978	0.065
45	8	0.97	1.361	0.4131	0.913	1.000	0.087
Mean	7.03						
SD	0.71						

The calculation obtained the value of L_{count} of = 0.128, L_{table} for $n = 45$ with a significant rate of 0.05 was 0.132. The $L_{count} < L_{table}$. Thus, the data were normally distributed.

Based on the calculation of the normality test with Lilliefors on the data of the Social Studies learning result using a comic, the value of L_{count} was 0.126, with the value of L_{table} for $n = 45$ with a significant rate of 0.05 was 0.132, then the value of $L_{count} < L_{table}$. Thus, the data of the Social Studies learning result after using comic media was normally distributed.

Table 2: Calculation of Normality with Lilliefors Data of Social Studies Learning Result After Using Comic Media

No.	X ₂	X ₂ - X ₂	Z _i	Z _t	F(z _i)	S(z _i)	[F(z _i) - S(z _i)]
1	7	-1.41	-2.036	0.4788	0.021	0.022	0.001
2	7	-1.41	-2.036	0.4788	0.021	0.044	0.023
3	7	-1.41	-2.036	0.4788	0.021	0.067	0.045
4	7.5	-0.91	-1.314	0.4049	0.095	0.089	0.006
5	7.5	-0.91	-1.314	0.4049	0.095	0.111	0.016
6	7.5	-0.91	-1.314	0.4049	0.095	0.133	0.038
7	7.5	-0.91	-1.314	0.4049	0.095	0.156	0.060
8	8	-0.41	-0.593	0.2224	0.278	0.178	0.100
9	8	-0.41	-0.593	0.2224	0.278	0.200	0.078
10	8	-0.41	-0.593	0.2224	0.278	0.222	0.055
11	8	-0.41	-0.593	0.2224	0.278	0.244	0.033
12	8	-0.41	-0.593	0.2224	0.278	0.267	0.011
13	8	-0.41	-0.593	0.2224	0.278	0.289	0.011
14	8	-0.41	-0.593	0.2224	0.278	0.311	0.034
15	8	-0.41	-0.593	0.2224	0.278	0.333	0.056
16	8	-0.41	-0.593	0.2224	0.278	0.356	0.078
17	8	-0.41	-0.593	0.2224	0.278	0.378	0.100
18	8	-0.41	-0.593	0.2224	0.278	0.400	0.122
19	8.5	0.09	0.128	0.0478	0.548	0.422	0.126
20	8.5	0.09	0.128	0.0478	0.548	0.444	0.103
21	8.5	0.09	0.128	0.0478	0.548	0.467	0.081
22	8.5	0.09	0.128	0.0478	0.548	0.489	0.059
23	8.5	0.09	0.128	0.0478	0.548	0.511	0.037
24	8.5	0.09	0.128	0.0478	0.548	0.533	0.014
25	8.5	0.09	0.128	0.0478	0.548	0.556	0.008
26	8.5	0.09	0.128	0.0478	0.548	0.578	0.030
27	8.5	0.09	0.128	0.0478	0.548	0.600	0.052
28	8.5	0.09	0.128	0.0478	0.548	0.622	0.074
29	8.5	0.09	0.128	0.0478	0.548	0.644	0.097
30	8.5	0.09	0.128	0.0478	0.548	0.667	0.119
31	9	0.59	0.849	0.2996	0.800	0.689	0.111
32	9	0.59	0.849	0.2996	0.800	0.711	0.088
33	9	0.59	0.849	0.2996	0.800	0.733	0.066
34	9	0.59	0.849	0.2996	0.800	0.756	0.044
35	9	0.59	0.849	0.2996	0.800	0.778	0.022
36	9	0.59	0.849	0.2996	0.800	0.800	0.000

No.	X ₂	X ₂ - X ₂	Z _i	Z _t	F(z _i)	S(z _i)	[F(z _i) - S(z _i)]
37	9	0.59	0.849	0.2996	0.800	0.822	0.023
38	9	0.59	0.849	0.2996	0.800	0.844	0.045
39	9	0.59	0.849	0.2996	0.800	0.867	0.067
40	9	0.59	0.849	0.2996	0.800	0.889	0.089
41	9	0.59	0.849	0.2996	0.800	0.911	0.112
42	9.5	1.09	1.571	0.4418	0.942	0.933	0.008
43	9.5	1.09	1.571	0.4418	0.942	0.956	0.014
44	9.5	1.09	1.571	0.4418	0.942	0.978	0.036
45	10	1.59	2.292	0.4899	0.990	1.000	0.010
Mean	8.41						
SD	0.69						

From the calculation, it was obtained that the value of L_{count} was = 0.126, L_{table} for $n = 45$ with a significant rate of 0.05 was 0.132. $L_{count} < L_{table}$. Thus, it can be concluded that the data were normally distributed.

Based on the homogeneity test result of the value of F_{count} (1.05) $<$ F_{table} (1.65), then the variation population was between group 1 and 2 (prior and after using a comic media) was homogeneity.

To see the efficacy of the character education based on Social Studies comic media in the teaching and learning process of Social Studies, a pre-test was conducted on 45 students. Moreover, the Social Studies score prior to using comic media was: \bar{X} (average) Social Studies learning result of 7.03 and the standard deviation of (SD) = 0.7103.

The Social Studies learning result after using a comic media \bar{X} (average) was 8.41 with the standard deviation of (SD) = 0.6932. Thus, the average of the Social Studies learning result using a comic media was higher (8.41 $>$ 7.03), compared to when a comic media was not used.

Based on the t-test calculation, it was obtained that the value of t_{count} of 11.67 with the value of t_{table} of 2.05, then the value of t_{count} (11.67) $>$ t_{table} (2.05) which means that there was an improvement of Social Studies learning result which was significant by using a comic media.

From the data, it was obtained that the value of t_{count} of 11.67 and the value of t_{table} with a one side test on a significant rate of 0.05 with $n-1 = 44$ was 1.75, then the value of t_{count} (11.67) $>$ t_{table} (2.05), which means a significant increase in the Learning Result using comics as a media for teaching and learning.

The research shows that the use of a Social Sciences comic based on character education as a learning medium allows students to understand the materials, and triggers reading habits. The use of the comic can interpret abstract ideas into more realistic forms (for example, honesty), because the materials are visualized both in pictures and captions. Students will eventually have more experiences so that comics promote Social Sciences learning outcomes.

The findings are in line with Mayer (2001: 63) noting that a combination of textual and visual aids will lead to better learning, compared to relying merely on texts. Research by Bingham, Reid & Ivanovic (2016: 5) gives a similar finding, pointing out that the use of comic as a leaning medium has been effective, due to it integrating texts, pictures and narration. Reading the comic, the students engage directly, visually and verbally. It is evident that comic is effective in improving student involvement in motivation, and in providing strategic messages to realize students' abstract concepts. *Comics have been used to motivate children to read* Haugaard (1973), in Hosler (2011).

Thus, the medium of Social Sciences comics, based on character education in learning that subject, can be considered as an alternative medium (tool) aiding learning about the subject. This research shares a similar viewpoint stating that *comics are regarded as tools, either for engaging pupils in the content of the curriculum ...* (Cary, 2004; Bucky, 2007; Thomson, 2008; Thurman & Hearn, 2010).

The novelty in this research is to create a comic book as the product which will be under further research, whilst the former focused on having an existing comic like the one conducted by Grzanka (2010), and Schwarz (2002).

The research conducted was a comic on history "Proclamation of Indonesian Independence" whereas a comic researched by Pannell (2012) was *Chronology of a Nazi* (Gray, 2011), on activism and anti-fascism.

Conclusion

It can be concluded that, firstly: "A Social Sciences comic based on character education for Primary School Students on the Proclamation of Indonesian Independence" is produced with the ISBN Number 978-602-8768-35-1, and proposed for Intellectual Property Rights Number EC00201814589, 4 June 2018. Secondly, the average score of students using the Social Sciences comic, based on national character in learning, is higher than that of students prior to using the comic $x = 8,41 > 7.03$. T-test calculation shows that $t_{count} = (11.67) > t_{table} (2.05)$. It means that there has been a significant learning outcome in Social Sciences, by using the comic. In other words, a combination of the textual and visual (comic) tool leads to better



learning compared to only texts. Primary school students' learning outcome in Social Sciences is better with the presence of comics rather than text only.

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